



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 3450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|-------------|----------------------|------------------------|------------------|
| 09/736,683 | 12/13/2000 | Elie Quzi Koskas | 28944/36991 | 7938 |
| 4743 | 7590 | 12/02/2005 | EXAMINER | |
| MARSHALL, GERSTEIN & BORUN LLP 233 S. WACKER DRIVE, SUITE 6300 SEARS TOWER CHICAGO, IL 60606 | | | LEROUX, ETIENNE PIERRE | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2161 | |

DATE MAILED: 12/02/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 09/736,683 | Applicant(s) KOSKAS, ELIE QUZI | |
| | Examiner Etienne P LeRoux | Art Unit 2161 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 September 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4-6, 9-11, 14-30 and 73-110 is/are pending in the application.
- 4a) Of the above claim(s) 31-43 and 64-72 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1,4-6,9 and 10 is/are allowed.
- 6) ☐ Claim(s) 11, 14-17, 73-76 and 90-97 is/are rejected.
- 7) ☒ Claim(s) 1,4-6,9,10,18-30,77-89 and 98-110 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 December 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Continued Examination

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 9/2/2005 has been entered.

Claims Status:

Claims 1, 4-6, 9-11, 14-30 and 73-110 are pending. Claims 2, 3, 7, 8, 12, 13 and 44-63 are cancelled. Claims 31-43 and 64-72 are withdrawn. Claims 1, 4-6, 9, 10, 18-30, 77-89 and 98-110 include allowable subject material. Claims 11, 14-17, 73-76 and 90-97 are rejected as detailed below.

Reasons for Allowance

The following is an examiner's statement of reasons for allowance:

Instant invention drawn to a method of encoding and combining integer lists in a computer system is allowable for including the following non-obvious improvement over the prior art of record, in conjunction with the remaining claim limitations:

Claims 1, 4-6, 9 and 10:

wherein a coding data container comprising records having respective addresses is provided for storing together the coding data produced from the input lists of said plurality of

Art Unit: 2161

integer lists, each record of the coding data container having a first field for storing an integer rank related to the pattern, a second field for storing an address value for another record of the data container and a third field for storing a bitmap segment.

Claims 18-30, 77-89 and 98-110:

whereby a combination of said layer k rank with any position designated by the data contained in said first field determines a layer k-1 rank with which a respective record of the layer k-1 data container is associated if $k > 1$, and an integer of said layer 1 input list if $k = 1$.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 11, 14-17, 73-76 and 90-97 are rejected under 35 U.S.C. 102(b) as being anticipated by US Pat No 5,906,297 issued to Cohen et al (hereafter Cohen), as best examiner is able to ascertain.

Claims 11, 14-17 and 74-76 and 90-97:

Art Unit: 2161

Cohen discloses producing coding data including, for each subset containing at least one integer of the input list, data representing the position of each integer of the input list within said subset [Fig 1, 104, col 5, lines 1-10] and, at least if said layer is the last coding layer, data representing the position of said subset in the pattern col 6, lines 7-25, grouping of bytes, Figs 2-4]; and if said layer is not the last coding layer, forming a further integer list representing the position, in the pattern of said layer, of each subset containing at least one integer of the input list, and providing said further integer list as an input list of the next layer [inherent in each represents a row in a database table, col 5, lines 20-25].

Claim 73:

Cohen discloses producing coding data including for each subset containing at least one integer of the input list [Fig 1, 104, col 5, lines 1-10],

data representing the position of said subset in the pattern [col 6, lines 7-25, grouping of bytes]

data representing the position of each integer of the input list within said subset [Figs 2-4]

Response to Arguments

Applicant's arguments filed 23 September, 2004 have been considered but are moot in view of the new ground(s) of rejection necessitated by applicant's amendment of the claims.

Art Unit: 2161

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Etienne LeRoux whose telephone number is (571) 272-4022.

The examiner can normally be reached on Monday – Friday from 8:00 AM to 4:30 PM.

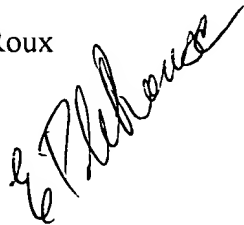
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Safet Metjahic, can be reached on (571) 272-4023.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2100.

Patent related correspondence can be forwarded via the following FAX number (703) 872-9306

Etienne LeRoux

11/26/2005

A handwritten signature in black ink, appearing to read 'Etienne LeRoux', is written over the printed name and date.